Electric Current Problems

1. If the current in a wire is measured to be 5 A, how much charge passes by a point in the circuit every minute?

2. The filament of a light has 3150 C of charge flow through it in 35 min. What is the current in the filament?

3. What is the current in a wire if 63 x 10-4 C of charge passes by a point in 5 seconds?

4. A load has a current of 88 mA flow through it. What quantity of charge flows through the load in 51 s?

5. How long does it take 50 C of charge to pass by a point if the current in the circuit is 0.89 A?

6. a) If the current in a wire is measured to be 3 A, how much charge passes by a point in the circuit every minute?

\*BONUS\* b) How many electrons is this? (1 C = 6. 25 x 1018 electrons)

Calculate the Current

Calculate the current in each of the following circuit diagrams. The current at the source is represented by IT



1. I2 = 6.0 A



2. I3  = 4.0 A



3. I2 = 6.0 A

I3 = 6.0 A

I5 = 2.0 A